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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,741	10/05/2001	Keith Allen	R-723-CIP	5377

7590 09/09/2002

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EXAMINER
QIAN, CELINE X

ART UNIT	PAPER NUMBER
1636	8

DATE MAILED: 09/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Response Due 9-Oct-02

Office Action Summary	Application No.	Applicant(s)
	09/972,741	ALLEN, KEITH
	Examiner	Art Unit
	Celine Qian	1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-72 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-72 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claims 1-72 are pending in the application.

Election/Restrictions

I. Claims 1-10 and 17-23 and 45-52, drawn to a magnesium-dependent protein phosphatase knockout targeting construct, a method of making said construct, a cell comprising said construct, a non-human transgenic animal comprising said construct, and a method of making said transgenic animal, classified in class 536, subclass 23.1, class 800, subclass 18 and 22.

II. Claims 11, 28-31, drawn to a method of identifying an agent that modulates the expression of a magnesium-dependent protein phosphatase by using a magnesium-dependent protein phosphatase knockout animal, classified in class 800, subclass 3.

III. Claims 12, 24-26 and 32-35, drawn to a method of identifying an agent that ameliorates a lung abnormality by using a magnesium-dependent protein phosphatase knockout animal, classified in class 800, subclass 3.

IV. Claims 12, 27, 32 and 33, drawn to a method of identifying an agent that reduces white blood cell count by using a magnesium-dependent protein phosphatase knockout animal, classified in class 800, subclass 3.

V. Claims 12, 32 and 53-55, drawn to a method of identifying an agent that modulates anxiety by using a magnesium-dependent protein phosphatase knockout animal, classified in class 800, subclass 3.

VI. Claims 12, 32 and 69-71, drawn to a method of identifying an agent that reduces pain by using a magnesium-dependent protein phosphatase knockout mouse, classified in class 800, subclass 3.

VII. Claims 13, 15, 36-39, drawn to a method of identifying an agent that modulates the expression of magnesium-dependent protein phosphatase by using a magnesium-dependent protein phosphatase knockout cell, classified in class 536, subclass 24.5.

VIII. Claims 14, 15, and 40-43, drawn to a method of identifying an agent that modulates the function of a magnesium-dependent protein phosphatase gene by using a magnesium-dependent protein phosphatase knockout cell, classified in class 435, subclass 325.

IX. Claim 16, drawn to an agent that modulates the function of a magnesium-dependent protein phosphatase gene, classified in class 424, subclass 130.1.

X. Claims 16 and 44, drawn to an agent that modulates the expression of magnesium-dependent protein phosphatase gene, classified in class 536, subclass 24.1.

XI. Claim 44, drawn to an agent that ameliorates a lung abnormality, classified in class 424, subclass 178.1.

XII. Claim 44, drawn to an agent that reduces white blood cell count, classified in class 424, subclass 130.1.

XIII. Claim 56, drawn to an agent that modulates anxiety, classified in class 530, subclass 350.

XIV. Claim 57, drawn to a method of treating anxiety by administering a magnesium-dependent protein phosphatase expression modulating agent to a subject, classified in class 536, subclass 24.5.

XV. Claims 57 and 58, drawn to a method of treating anxiety by administering a magnesium-dependent protein phosphatase activity modulating agent to a subject, classified in class 514, subclass 44.

XVI. Claims 59-65, drawn to a method of treating anxiety by administering a magnesium-dependent protein phosphatase, classified in class 530, subclass 183.

XVII. Claims 62 and 66, drawn to a pharmaceutical composition comprising a magnesium-dependent protein phosphatase, classified in class 424, subclass 94.1.

XVIII. Claims 67 and 68, drawn to a method of reducing pain by administering a magnesium-dependent protein phosphatase expression modulator to a subject, classified in class 514, subclass 44.

XIX. Claims 67 and 68, drawn to a method of reducing pain by administering a magnesium-dependent protein phosphatase activity modulator to a subject, classified in class 424, subclass 93.1.

XX. Claim 72, drawn to an agent that reduces pain, classified in class 514, subclass 1.

The inventions are distinct, each from the other for following reasons.

The invention of Groups I, IX-XIII, XVII, and XX are patentably distinct from each other because the inventions are drawn to materially different compositions that are not directly related. Inventions are unrelated if it can be shown that they are not disclosed as capable of use

together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different function, and different effects. The products of Groups I, IX-XIII, XVII, and XX have different chemical structures, are made by different methods, and can be used in different methods which require different technical considerations and materially different reagents. Therefore, the inventions of Groups I, IX-XIII, XVII and XX are patentably distinct from each other.

The inventions of Groups II-VIII, XIV-XVI, XVIII and XIX are patentably distinct because the inventions are drawn to methods that require different starting materials and modes of operation. Each method has a distinct purpose and further comprising distinct methodologies and using different products. Therefore, the inventions of II-VIII, XIV-XVI, XVIII and XIX are patentably distinct from each other.

The inventions of Group I, IX-XIII, XVII and XX are patentably distinct from the inventions of Group II-VIII, XVI, XVIII and XIX because the inventions are drawn to compositions and methods that are not directly related. Although some of the products can be used in some of the methods, the inventions is considered to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). For example, the transgenic mouse of Group I can be used in the methods of Groups II-VI. Since the methods of Groups II-VI are four different processes, it is clear that the transgenic mouse of Group I can be used in materially different processes. In addition, the method of Groups II-VI can also be practices with

magnesium-dependent protein phosphatase knockout somatic cell. Therefore, the inventions of Groups I, IX-XIII, XVII and XX are patentably distinct from the inventions of Groups II-VIII, XVI, XVIII and XIX.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. A search of the subject matter of one invention would not be co-extensive with a search of the other invention, and therefore the search would be burdensome. Each invention is capable of supporting a separate patent.

Applicant is advised that reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celine X Qian whose telephone number is 703-306-0283. The examiner can normally be reached on 9:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel can be reached on 703-305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Celine Qian, Ph.D.
August 13, 2002

TERRY MCKELVEY
PRIMARY EXAMINER